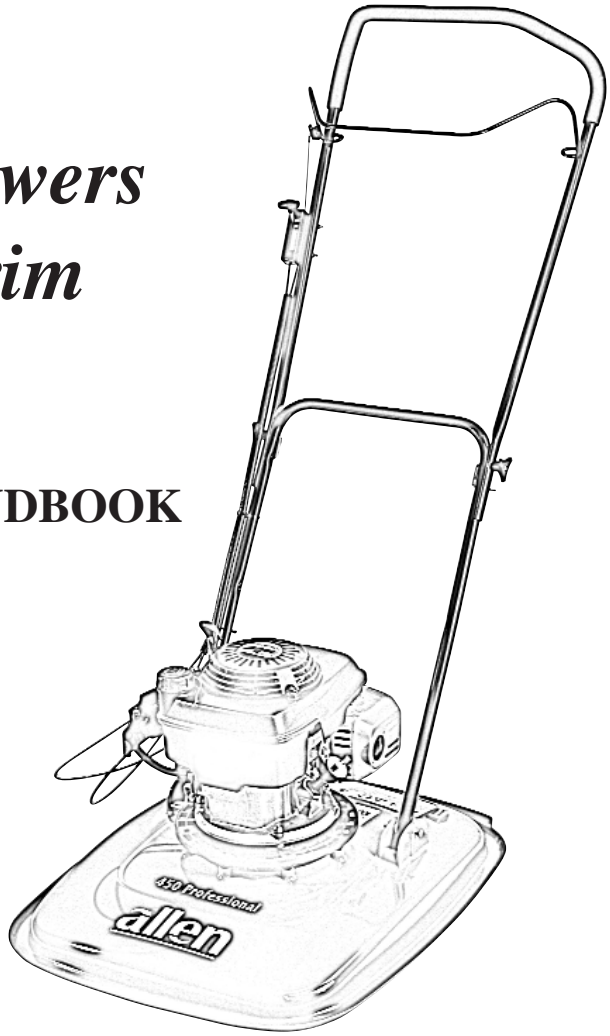
111-2596 (A) 23/7/08 3:27 pm Page 1.1

allen

Manufactured by Hayter Limited

Hover Mowers & Hovertrim



OWNER'S HANDBOOK

MODELS:

446 Hovertrim
450 Professional
453 Professional

(English Version)
ISSUE 23.07.08
CODE FROM SERIAL NO.
180E 280010000
181E 280010000
182E 280010000

PART NUMBER: 111-2596 (1)

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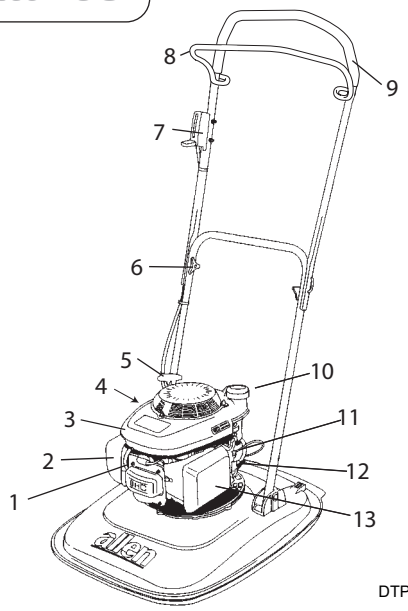
MAIN FEATURES SPECIFICATIONS

Main Features

1. Spark Plug/Lead.
2. Exhaust Guard.
3. Engine Cover.
4. Serial No.Label.
5. Engine Start-Grip.
6. Handlebar Securing Knob.
7. Throttle Control.
8. Engine Stop Lever.
9. Handlebar.
10. Fuel Cap.
11. Oil Dipstick.
12. Fuel On/Off Tap.
13. Air Cleaner.



DTP-000-010-A

Specifications

Code	180	181	182
Model	**446 Hovertrim**	**450 Professional**	**453 Professional**
Engine	Honda	Honda	Honda
Engine type	GCV135	GCV160	GCV160
Fuel type	Unleaded petrol	Unleaded petrol	Unleaded petrol
Fuel capacity	0.9 litres	1.1 litres	1.1 litres
Engine Oil type	SAE 10W-30	SAE 10W-30	SAE 10W-30
Oil sump capacity	.55 litres	.55 litres	.55 litres
Cutting width	46 cm (18”)	51cm (20”)	53cm (21”)
Dry Weight	17.6kg	19kg	19kg

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INTRODUCTION

Thank you for purchasing an **Allen** machine. The following pages are designed to help you gain safe and efficient service from your machine.

IMPORTANT: This 'Owners Handbook' should be regarded as part of the product as it gives essential information regarding mower safety, operation, maintenance and specifications. Read and understand this handbook prior to operating your machine for the first time. Make sure you are familiar with all the controls and points of regular maintenance. If you have any doubts, consult your local authorised dealer who will be pleased to give you assistance.

IMPORTANT: This machine is designed solely for cutting grass and other low lying ground vegetation within the limitations stated in this manual. Use in any other way is considered as contrary to the intended use. Compliance with and strict adherence to the conditions of operation, service and repair as specified in this handbook also constitute essential elements of the intended use.
This machine should be operated, serviced and repaired only by persons who are familiar with its particular characteristics and who are acquainted with the relevant safety procedures.

The safety precautions listed in this handbook and all other generally recognised regulations on safety must be observed at all times.
Any arbitrary modifications carried out to this machine may relieve the manufacturer of liability for any resulting damage or injury.

Allen machines are robustly constructed and designed for efficient economical performance under normal mowing conditions. Correct operation and maintenance will ensure a long and satisfactory service life. Prior to despatch from our factory every effort is made to ensure that your mower is delivered in perfect condition.

Throughout this handbook all references to **left** and **right** are as viewed from behind the handlebar, in the direction of forward travel.

This handbook is based on information available at the time of publication.

We reserve the right to amend product specifications without prior notification.

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WARRANTY

LIMITED WARRANTY

Allen mower's are manufactured by Hayter Limited.

The manufacturer warrants to the original user/purchaser that this unit shall be free from defects in material and workmanship under normal use and service for a period of **one year** from the date of purchase. The manufacturers of the engine furnish their own warranty and services are provided through their authorised network (Refer to "Engine Warranty Statement"). To qualify for the full benefit of the warranty, the Warranty Registration Card must be returned within 14 days of purchase. If the selling dealer has not returned the Warranty Registration Card please complete and return. Subject to the conditions and exclusions noted in this limited warranty, we shall at our option, repair or replace any warranted part during the applicable period. If you are in doubt or experience any difficulty, please contact an Authorised Service Dealer for clarification.

A 90 day warranty period applies to those items which are subject to normal wear and tear e.g. flexiblades, cables and other consumable wearing parts.

This warranty does not apply to any unit that has been tampered with, altered, misused, abused or used for hire, and will become invalid if non genuine parts are fitted. This warranty does not cover for minor mechanical adjustments unless they are due to defective material or workmanship. Consult the Owner's Handbook or an Authorised Service Dealer for assistance when making these adjustments.

To make a warranty claim, return the unit to an Authorised Service Dealer along with proof of purchase stating the machine serial number and date of purchase. Subject to the conditions and exclusions in tis limited warranty, the authorised dealer will, at our option, repair or replace any warranted part within the duration of the warranty period.

This limited warranty gives you specific legal rights and is in addition to any statutory rights to which you may be entitled and your statutory rights are not affected by this warranty. If you need additional information concerning this written warranty, or assistance in obtaining services, please write to : **HAYTER LIMITED, Service Department, Spellbrook, Bishop's Stortford, Hertfordshire CM23 4BU**

Issue: 16.05.08

UK ONLY: Details of your local authorised dealer are contained in Yellow Pages and the Hayter website www.hayter.co.uk or contact contact:- Freephone 0800 616298.

SAFETY PRECAUTIONS

Safety Alert Symbol

This safety alert symbol indicates important safety messages. When you see this symbol be alert to the possibility of injury. Carefully read the following and inform others.

Your machine is perfectly safe if used correctly. Failure to observe the following precautions may result in serious injury.

Training

Read the Owner's Handbook and other training material. If the operator(s) or mechanic(s) cannot read English it is the owner's responsibilty to explain this material to them.

Become familiar with the safe operation of the equipment, operator controls, and safety signs.

All operators and mechanics should be trained. The owner is responsible for accidents or injuries occuring to themselves, other people or property.

Never let children or untrained people operate or service the equipment. Local regulations may strict the age of the operator.

Preparation

While using the machine, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing sandals.

Thoroughly inspect the area where the machine is to be used and remove all objects which may be thrown by the machine.

WARNING: Petrol is highly flammable.
- Store fuel in containers specifically designed for this purpose.
- Before starting the engine add fuel outdoors only. Never remove the cap from the fuel tank or add petrol while the engine is running or when the engine is hot. Allow the engine to cool for at least two minutes before refuelling. Do not smoke while refuelling.

SAFETY PRECAUTIONS

Preparation

- Do not attempt to start the engine if petrol is spilled or a smell of petrol is present. Move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapours have dissipated.
- Replace faulty silencers.
- Always use fresh fuel. Stale fuel can block the carburettor and cause leakage.
- Replace fuel tank and oil tank caps securely.

A damaged cutting device or impeller or both must be replaced. Before use, always visually inspect the cutting mechanism to ensure that it is in good condition. Do not operate the machine with an out of balance cutting device or impeller.

- Check all nuts and bolts and tighten when necessary.

Operation

Do not operate the engine in a confined space where exhaust fumes (carbon monoxide) can collect. Refuel outdoors only and do not smoke while refuelling.

Always pull the starter cord slowly until resistance is felt. Then pull the cord rapidly to avoid kickback and prevent hand or arm injury.

Operate only in daylight or good artificial light.

Avoid using the machine on wet grass, where feasible.

Always be sure of your footing on slopes.

Walk, never run.

Operate across the face of slopes, never up and down.

Exercise extreme caution when changing direction on slopes.

Do not use on excessively steep slopes.

Use extreme caution when pulling the machine towards you.

Stop the engine before moving the machine across areas other than grass.

Do not change the engine governor settings or overspeed the engine.

Start the engine carefully, with feet well away from the cutting device.

SAFETY PRECAUTIONS

Operation

Do not put hands or feet near or under rotating parts.

Never pick up or carry the machine while the engine is running.

Never touch the exhaust/exhaust guard or cooling fins when the engine is hot.

Stop the engine and disconnect the spark plug lead:

- Before clearing blockages.
- Before cleaning/checking or working on the machine.
- After striking a foreign object. Inspect the machine for damage and ensure necessary repairs are made before re-starting.
- If the machine starts to vibrate abnormally (check immediately). (An out of balance cutting device causes severe vibration).

Stop the engine:

- Whenever you leave the machine.
- Before refuelling.

Never operate the trimmer with defective guards, or without safety devices, in place.

Maintenance & Storage

Keep all nuts, bolts and screws tight to ensure that the equipment is in safe operating condition.

Frequently check fuel lines and fittings for cracks or leaks and replace if necessary.

Never check for a spark when the spark plug is removed. (Use approved tester)

Inspect the exhaust periodically and replace if worn or leaking.

Never crank the engine with the spark plug removed.

Never start the engine with the air-cleaner or air-cleaner cover removed.

Never store the machine with petrol in the tank within an enclosed area where fumes may reach an open flame or spark.

Allow the engine to cool before storing in any enclosure. To reduce the fire hazard, keep the engine and the surrounding deck area free of grass, leaves, or excessive grease.

SAFETY PRECAUTIONS

Maintenance & Storage

If the fuel tank has to be drained, this should be done outdoors and when the engine is cool.

Wear strong work gloves when removing and reassembling the cutting device.

Always replace worn or faulty parts with genuine Allen parts.

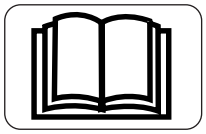
Safety Symbols

Safety Alert - Be aware to the possibility of injury.

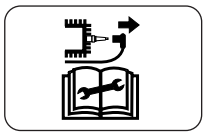
Danger of severing toes or fingers in cutting mechanism.

Danger of being hit by thrown objects.

Carefully read the Owners Handbook before using the machine.



Stop engine and remove spark plug lead before working on the mower.



Keep bystanders at a safe distance from the mower.

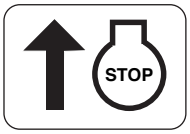
Hearing and eye protection should be worn.
Code 180 only

Never fit metal cutting parts.
Code 180 only

Keep bystanders at least 15m from the trimmer.
Code 180 only

Information Symbols

Engine Stop

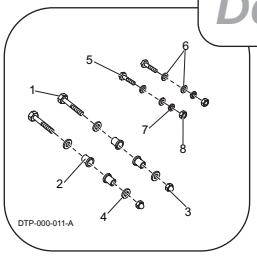


Throttle Control (Symbols)

Choke Fast Slow

ASSEMBLING THE MACHINE

Delivery Checklist



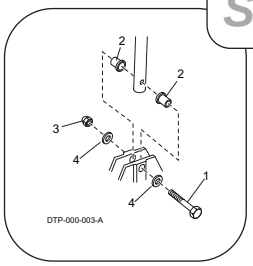
Remove the machine from the packaging and check that the following items have been supplied correctly. If any items are missing contact, your local dealer. Main deck, lower and upper handlebars.

1. Handlebar bolt x 2
2. Bush x 4
3. Nut x 2
4. Washer x 6
5. Throttle bolt x 2
6. Washer x 4
7. Spring washer x 2
8. Nut x 2
9. Spanner x 1*
10. Ties x 2*
11. Ties*
12. U Bolt x 2*
13. Handwheel x 2*

*Items 9 - 13 Not Illustrated

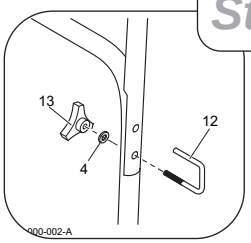
Assembling

Step 1 Lower Handlebar



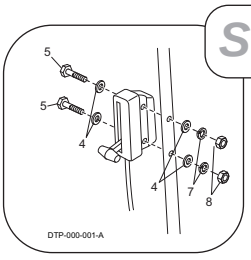
Fit the lower handle first, and position the white bushes (2) as shown on both sides. Place the lower handle between bushes with the kick stop assembley on the right hand side. Attach the lower handle using the fixings supplied.

Step 2 Upper Handlebar



Assemble the upper handle align holes and fit U-bolts, washer and hand/wheel.

Step 3 Throttle Assembly

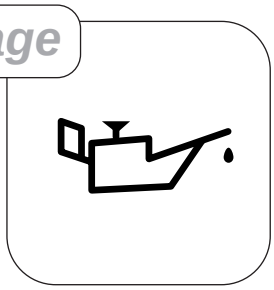


Attach throttle assembly to the outside of the handlebar as shown and secure the cable using ties supplied.

BEFORE STARTING THE MACHINE

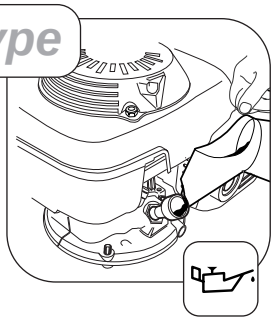
Prevent Engine Damage

To prevent engine damage the engine is shipped without oil or petrol. The engine must be filled with the correct grade of oil and petrol before starting.



Oil Type

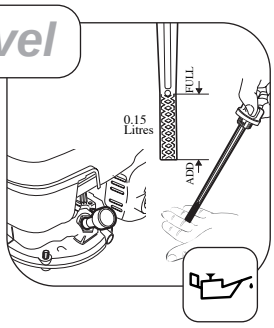
Always use high quality detergent oil classified SAE 10W-30. Never use additives with recommended oil.
To prolong the life of your engine it is important that the oil is changed after the first 5 hours of use - refer to 'Maintenance Schedule'.



Check Oil Level

Clean around the oil filler cap before removing. With the mower on a level surface, unscrew and remove the oil filler - dipstick. Wipe oil from it with a clean cloth. Insert the dipstick into the oil filler neck, but do not screw it in, then remove to check the oil level.

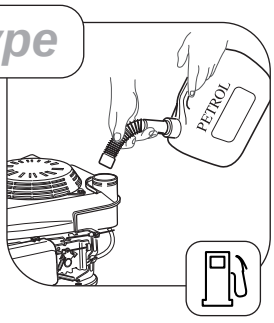
The oil level is correct when it is at the **full** mark on the dipstick.
DO NOT OVERFILL.



Fuel Type

Always use clean, fresh unleaded petrol. Purchase fuel in quantities that can be used within 30 days. Never mix oil with petrol.

Fill to base of neck to allow for fuel expansion. Do not overfill the fuel tank.

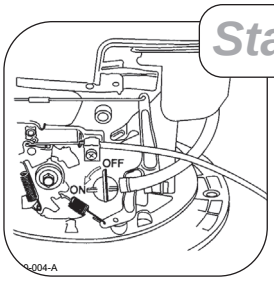


OPERATING THE MACHINE

Controls

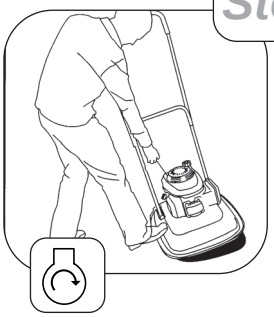
Check that the engine stop lever moves freely and returns to it's rest position when released.

Starting - Step 1



Place the throttle control to the start position, ensure that the fuel tap is in the 'On' position and the tank vent is open (if fitted).

Step 2

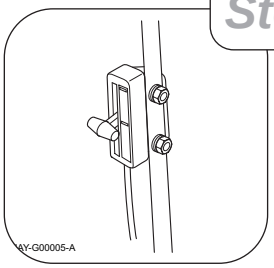


Release the handlebar from it's parked position. Hold the engine stop lever against the handlebar, place your foot on the deck and tilt the mower towards you. This will take the load off the engine making it easier to start.

Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.

The engine stop lever must be held firmly against the handlebar to start and keep the engine running. If the engine stop lever is released the engine will stop.

Step 3



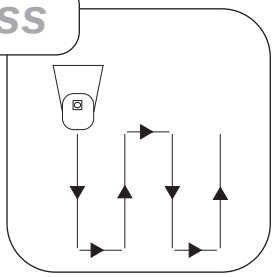
Allow the engine to warm up and move the throttle lever to the '**run**' position after starting a cold engine.

To prevent damage never pull the engine start grip when the engine is running.

OPERATING THE MACHINE

Cutting Grass

Start at the outside boarder of the lawn and move up and down as you would with a conventional walk behind mower.



Cutting Grass on Slopes and Banks

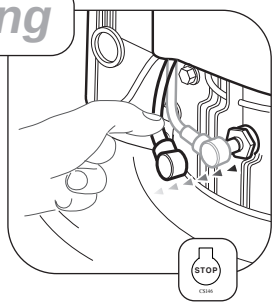
Start at the top and move the machine from side to side while slowly and carefully moving down the slope.

Caution: Try to keep the machine moving to reduce excessive loading on the engine.

Stopping

Release the engine stop lever.

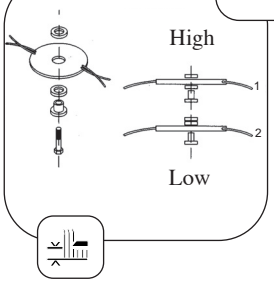
Emergency stop: Release the engine stop lever.
If the engine fails to stop, disconnect the spark plug lead.



OPERATING THE MACHINE

Adjusting the Cutting Height

Flexiblade 446



The cutting height of your mower has been set at the highest position (1). If you prefer a lower cut follow these instructions:

a. Turn the petrol tap to the off position.

b. Disconnect the spark plug lead.

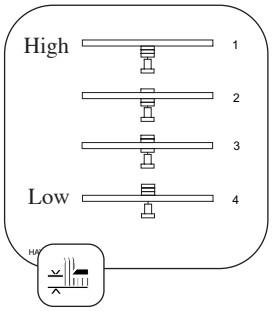
c. Turn the mower on its left hand side, keeping the carburetor uppermost.

d. Wearing protective gloves remove the flexiblade/cutterbar.

e. Remove the retaining bolt with the spanner provided whilst holding the blade or disc. Make sure your hands are adequately protected from the cutting edge.

f. Reposition the spacers as required. See diagrams for cutting device option.

Cutterbar 450 / 453

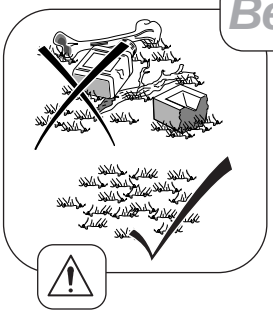


Note for the 446 Hovertrim: One spacer is required above the disc at all times.

NOTE: The large spacer must be positioned directly below the impeller at all times.

TIGHTEN THE BLADE RETAINING BOLT - USE ONLY THE SPANNER PROVIDED.

Before Mowing



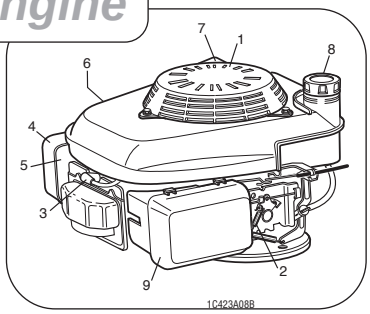
To prevent accidents, thoroughly inspect the area and remove all objects which when contacted by the mower cutterbar could become dangerous projectiles. Inspect the area for hidden obstructions which when contacted by the cutterbar could risk health and safety or result in damage to the mower. Remember the location of these obstructions and ensure that you mow around them.

MACHINE MAINTENANCE

To prevent accidents stop the engine disconnect the spark plug lead before attempting to carry out maintenance procedures on the mower.

Engine

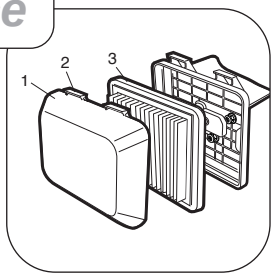
1. Finger Guard
2. Carburettor
3. Spark Plug / Lead
4. Exhaust Guard
5. Exhaust
6. Oil filler Cap/ Dipstick
7. Start Grip
8. Fuel Cap
9. Air cleaner.



Carburettor Adjustments

Should only be made by an authorised Honda dealer. Under no circumstances should the engine be adjusted to run at a speed in excess of that shown on the Declaration of Conformity.

Air Cleaner Service



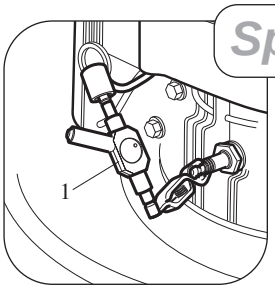
To service the air cleaner remove the air cleaner cover (1) by releasing two top catches (2) and tilting away from body until lower tabs release. Remove cartridge (3) and clean by tapping gently on a flat surface. If very dirty or damaged replace.

- Do not brush
- Do not use petroleum solvents.
- Do not oil the cartridge.

After servicing, install the cartridge in the cover. Insert the tabs on the bottom of the cover into the slots in the bottom of the base.Tilt the cover upwards until the two catches (2) hold it in place.

MOWER MAINTENANCE

Spark Plug Service



Use only an approved spark tester (1) to check for a spark as shown in the diagram.

Replace the spark plug every 100 hours or every season, whichever occurs first. A spark plug wrench is available from any authorised Honda service dealer.

Check the spark plug gap with a feeler gauge and set at 0.7 - 0.8mm.

Keeping Engine Clean

Remove all grass and debris from the engine including the exhaust/exhaust guard, the air ways in the top cowl and the surrounding deck areas on a daily basis after use. Never spray the engine with water during cleaning. Water can contaminate the fuel. Always clean with a brush or compressed air.

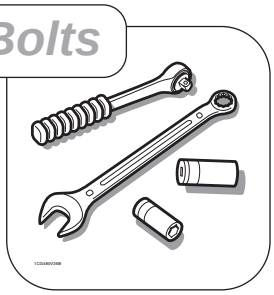
Grass and debris may clog the engine's air cooling system especially after prolonged operation while cutting tall, dry grass. The internal cooling fins and surfaces may require cleaning to prevent overheating and engine damage. We recommend that this service be carried out by an authorised dealer.

MACHINE MAINTENANCE

Deck Housing

Remove grass debris from the top and underside of the deck immediately after use.

Securing Nuts & Bolts



Regularly check that all securing nuts and bolts are tight. Replace missing or damaged items immediately.

The following torque settings apply:

Bolt 111-1504 2 1/4 x 1/4 Hex Head tighten to 25Nm.

Oil Service

Check the oil level daily before starting the engine and ensure that the correct oil level is maintained. Refer to-'Before Starting the Mower' for oil checking and filling instructions.

Change the engine oil after the first 5 hours of operation and thereafter according to the 'Maintenance Schedule':-

1. Drain fuel by running the engine until the fuel tank is empty.
2. Remove the spark plug lead.
3. Allow the engine to cool.
4. Drain the oil while the engine is warm.(Not hot)
5. Tip the machine over on to its side ensuring that the air cleaner is uppermost.
6. Remove the oil filler dipstick and drain the oil into a suitable container.
7. Refill with new oil of the recommended SAE viscosity grade. (Refer to-'Before Starting the Mower')

MACHINE MAINTENANCE

Cutterbar Removal

Drain the fuel by running the engine until the fuel tank is empty and the engine stops. **Remove the spark plug lead** and allow the engine to cool. Turn the mower on its left hand side and ensure that the carburettor is uppermost.
Firmly grip the end of the cutterbar with the gloved hand and remove the bolt with the supplied spanner.

To prevent accidents never work on the cutterbar unless the spark plug lead has been removed. The cutterbar has sharp edges. ALWAYS wear strong gloves to protect your hands when working on the cutterbar. DO NOT rotate tools towards the cutting edges to avoid the risk of injury should the tool slip. ALWAYS use genuine replacement parts.

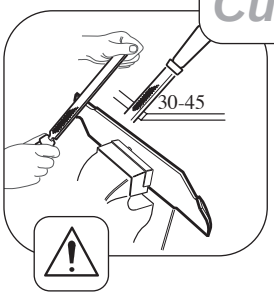
The condition of the cutterbar and its mounting arrangement should be checked regularly for signs of wear or damage. Ensure that the cutterbar is not bent or cracked.

A damaged cutterbar that is out of balance will vibrate excessively and may break. DO NOT use an unbalanced cutterbar.

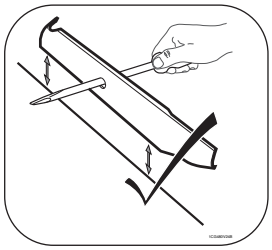
Regularly check that the bolt securing the cutterbar is tightened.

Replace the cutterbar every 2 years of sooner if excessively worn or damaged.

Cutterbar Sharpening



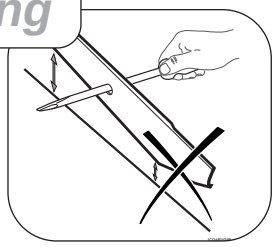
A slightly worn cutterblade may be re-sharpened. Both blade edges must be sharpened equally to ensure balance. Sharpen the cutterblade every 25 mowing hours or more frequently if conditions require. Remove the cutterblade from the mower and clean using a brush and water. Inspect the cutterblade for signs of damage.
Sharpen both cutting edges with a flat file to restore performance.



Ensure that the cutterblade is balanced. Use a screw driver with a round shaft to support the cutterblade through its centre hole. Hold the cutterblade horizontal and then release. A balanced cutterblade will remain horizontal.

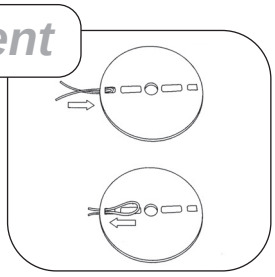
Continued

Cutterbar Sharpening



If the cutterblade is not balanced the heavy end will rotate downwards. Sharpen the heavy end until the cutterblade is correctly balanced.

Flexiblade Replacement



Drain the fuel by running the engine until the fuel tank is empty and the engine stops. **Remove the spark plug lead** and allow the engine to cool. Turn the mower on its left hand side and ensure that the carburettor is uppermost. Wearing protective gloves remove flexiblade and replace with new.

Storage

Engines stored in excess of 30 days need to be protected with a fuel additive or drained of fuel to prevent gum from forming in the fuel system or on essential carburettor parts. To ensure your mower is maintained in good working order it is important that the following procedure is adopted. Refer to the engine handbook as necessary.

Drain fuel from the engine by operating the engine until it stops. **See Engine Manual.**

Disconnect the spark plug lead.

Change the engine oil.

Remove the engine spark plug and pour 15ml of engine oil into the engine cylinder and replace the spark plug. Do not exceed the stated volume of oil as engine damage may occur on re-starting. **Do not replace the spark plug lead**. Slowly pull the engine start - grip once to crank the engine. This will distribute the oil and help prevent engine corrosion.

Clean grass and debris from the engine cylinder, cylinder head cooling fins, under top cowl, and around and behind exhaust/exhaust guard.

Treat metal parts with a water repellent anti-corrosion product.

Cover the mower with a protective sheet and store it in a dry, ventilated area.

TROUBLE SHOOTING

PROBLEM	POSSIBLE FAULT	REMEDY
Engine will not turn over	Engine stop lever released.	Operate engine stop lever.
	Incorrect oil level.	Check oil level.
	Obstruction under deck.	Remove obstruction.
Engine smokes	Excess oil level.	Check oil level.
	Air cleaner cartridge oil soaked or blocked.	Service air cleaner.
Engine runs then stops	Fuel starvation.	Fill fuel tank.
	Fuel cap vent blocked.	Clean fuel cap vent.
	Fuel tap closed.	Open fuel tap (if fitted).
Engine will not start	Engine under load.	Raise height of cut.
	Fuel starvation.	Fill fuel tank.
	Engine cold.	Set throttle to ‘choke’ position.
	Incorrect/contaminated fuel.	Drain fuel tank and fill with correct fuel.
	Spark plug lead disconnected.	Connect spark plug lead.
	Throttle setting incorrect.	Set throttle to ‘start’ position.
	Faulty spark plug.	Clean and adjust gap or replace.
Engine runs rough	Spark plug lead becoming disconnected in use.	Connect spark plug lead.
	Faulty spark plug.	Clean and adjust gap or replace.
	Air cleaner blocked.	Service air cleaner.
	Incorrect/contaminated fuel.	Drain tank and fill with correct fuel.

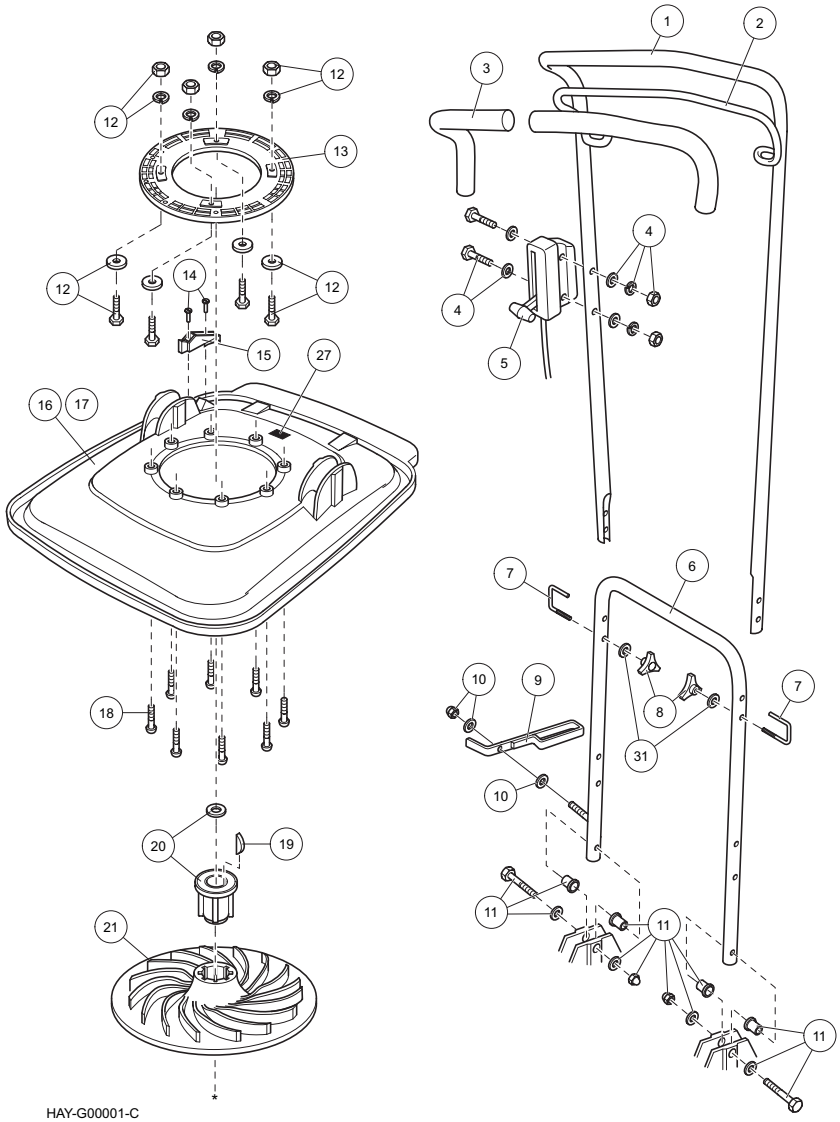
TROUBLE SHOOTING

PROBLEM	POSSIBLE FAULT	REMEDY
Engine vibrates excessively	Mounting bolts loose.	Tighten bolts
	Cutterbar bolt loose.	Tighten bolt
	Cutterbar out of balance. Bent crankshaft.	Balance cutterbar Consult your dealer
	Damaged impeller or blade	Consult your dealer
Uneven cut	Cutterbar out of balance	Balance the cutterbar
Poor hovering	Engine running slow	Consult your dealer
	Impeller air vents blocked	Check and unblock
	Underdeck not clean	Clean
	Blade loose	Tighten blade

MAINFRAME PARTS LIST

Item No.	Description	Part No.	Qty 446	Qty 450	Qty 453	Item Note
1	Upper Handle	H290237	1	1	1	
2	Engine Stop Lever	H290239	1	1	1	
3	Grip - Handle Upper	H292276	2	2	2	
4	Kit Cable Securing	H190139	1	1	1	
5	Throttle/Brake Control	H292315	1	1	1	
6	Lower Handle	H290288	1	1	1	
7	M6 U Bolt BZP	H292026	2	2	2	
8	Handwheel M6	H192204	2	2	2	
9	Footstop	H290286	1	1	1	
10	Kit Footstop Securing	H290265	1	1	1	
11	Handlebar/Deck Fix Kit	H290097	2	2	2	
12	Kit Engine Securing	H290267	1	1	1	
13	Kit Engine Mount frame	H290003	1	1	1	
14	Screw	H292279	2	2	2	
15	Upstop Bracket	H292269	1	1	1	
16	Deck 446	H290270	1	0	0	
17	Deck 450/453	H290271	0	1	1	
18	Kit Engine Bolts	H290004	1	1	1	
19	Key Woodruff D16 X 4	H292329	1	1	1	
20	Drive Hub	H290011	1	1	1	
21	Impeller Mk II	H192268	1	1	1	
22	Spanner Petrol	H190210	1	1	1	Not Shown
23	Decal-Warning	111-0083	0	1	1	Not Shown
24	Decal 446 Hovertrim Logo	H295125	1	0	0	Not Shown
25	Decal 450 Professional Logo	H295126	0	1	0	Not Shown
26	Decal Logo Allen	H295128	1	1	1	Not Shown
27	Decal - Man Eye / Ear Protection	111-2153	1	0	0	Not Shown
28	Decal Stop	H295159	1	1	1	Not Shown
29	Decal 453 Hover Prof	H295160	0	0	1	Not Shown
30	Decal-Warning	111-2521	1	0	0	Not Shown

MAINFRAME PARTS LIST

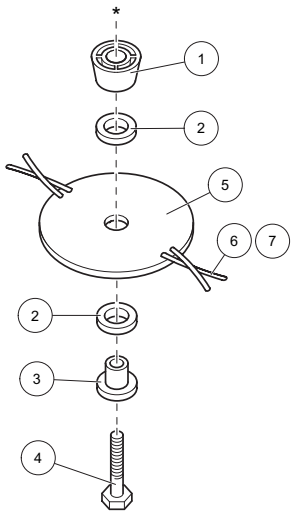


BLADE OPTIONS PARTS LIST

KIT OPTIONS

Item No.	Description	Part No.	446 Qty	450 Qty	453 Qty	Item Note
1	Spacer	H192270	1	1	1	
2	Spacer Disc	H192025	2	3	3	
3	Blade Ret.Spigot Steel	H192272	1	1	1	
4	Blade/Head Bolt	H292018	1	1	1	
5	Safeway Disc	H292401	1	0	0	
6	Flexiblade 143mtr	H292384	1	0	0	
7	Flexiblade 27mtr	H292385	1	0	0	
8	Blade 20"	H292351	0	1	0	
9	Blade 21"	H192299	0	0	1	

Code 446



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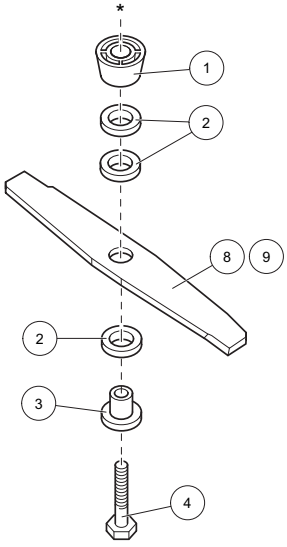
Code 450/453

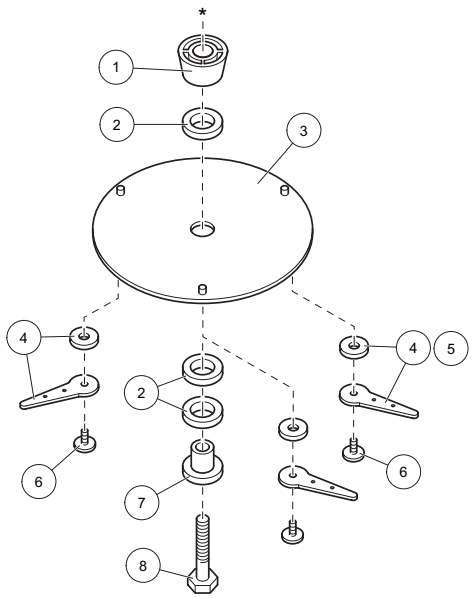


KIT OPTIONS Continued

Kit - Swinging Blade

Item No.	Description	Part No.	446 Qty	450 Qty	453 Qty	Item Note
1	Spacer	H192270	1	1	N/A	
2	Spacer Disc	H192025	3	3	N/A	
3	Bottom Plate	H292340	1	0	N/A	
3	Bottom Plate	H292341	0	1	N/A	
4	Swinging Blade (Pack 3)	H292318	1	1	N/A	
5	Swinging Blade (Pack 60)	H292318-60	1	1	N/A	
6	Blade Retaining Kit (Pack 3)	H290276	1	1	N/A	
7	Blade Ret.Spigot Steel	H192272	1	1	N/A	
8	Blade/Head Bolt	H292018	1	1	N/A	

Kit - Swinging Blade
Code 446/450



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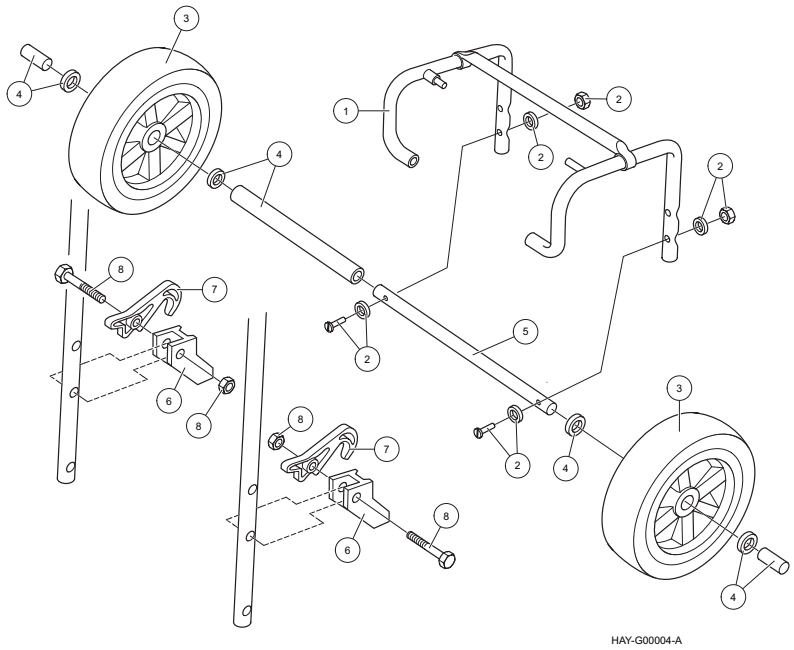
KIT OPTIONS PARTS LIST

Kit - Undercarriage (Transport Wheel)

Item No.	Description	Part No.	446 Qty	450 Qty	453 Qty	Item Note
1	Undercarriage	H192284	1	1	1	
2	Kit Axle Securing Bolts	H190235	1	1	1	
3	Wheel	H292033	2	2	2	
4	Kit Axle Spacers	H290032	1	1	1	
5	Axle	H192286	1	1	1	
6	Spacer Under Carriage	H192281	2	2	2	
7	Hook Petrol Hover	H192282	2	2	2	
8	Handlebar/Deck Fix Kit	H290097	2	2	2	



Kit - Extension Handles

Item No.	Description	Part No.	446 Qty	450 Qty	453 Qty	Item Note
1	Throttle Control & OPC	H292387	1	1	1	Not Shown
2	Handwheel	H192204	2	2	2	Not Shown
3	Handlebar Extension	H292392	1	1	1	Not Shown

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DECLARATION OF CONFORMITY

EC DECLARATION OF CONFORMITY

Manufacturer: HAYTER LIMITED,
Address: Spellbrook, Bishop's Stortford, Herts. CM23 4BU. ENGLAND

declare that the trimmer:

Model name:	Hovertrim
Model No:	CODE 180E
Cutting width:	46 cm
Speed of rotation of the cutting device:	3400 rpm
Engine Manufacturer:	Honda
Speed of rotation of engine:	3400 rpm

Complies with the provisions of Directive: 98/37/EC Essential Health & Safety Requirements. Relating to the Design & Construction of Machinery and Safety Components, as amended and the regulations transposed into national law.

Also Directive 2004/108/EC Electromagnetic Compatibility and the regulations transposed into national law.

Complies with harmonized standards: EN 14910, EN 14982.

NOISE INFORMATION
The noise levels measured in accordance with European Standard EN 14910

Machine sound power level:	98 dB(A)
Sound level at operator's ear:	85 dB(A)

Declaration done and technical documentation kept at:
HAYTER LIMITED
Spellbrook, Bishop's Stortford,
Herts. CM23 4BU ENGLAND

Date: 02.03.2007

Authorised Signatory:

Mr. S. A. Maryniak

Vibration Information
The vibration level at the operator contact positions, measured in accordance with European Standard EN 836.
CODE 180E – 5.59 ms^{-2}

Operators Daily Personal Noise Exposure:
HAYTER LIMITED have no control over site conditions, duration of use, state of maintenance or adjustment of the mower. All these factors will affect the operator's daily personal noise exposure level – LEP,d. Under typical working conditions operators could be exposed to a daily personal noise exposure level in excess of 85 dB(A) LEP,d.

If hearing protection is required, ear protectors with good attenuation in the 63 – 8000 Hz frequency range should be used.

Employers of personnel using this machine are advised to read "The Control of Noise at Work Regulations 2005" as the operator's daily personal exposure level could be above the 'First Action Level'.

DECLARATION OF CONFORMITY

EC DECLARATION OF CONFORMITY

Manufacturer: HAYTER LIMITED,
Address: Spellbrook, Bishop's Stortford, Herts. CM23 4BU. ENGLAND

declare that the lawnmower:

Model name:	Hovermower	Hovermower
Type:	Pedestrian rotary	Pedestrian rotary
Model No:	CODE 181E	CODE 182E
Cutting width:	51 cm	53 cm
Speed of rotation of the cutting device:	3300 rpm	3300 rpm
Engine manufacturer:	Honda	Honda
Speed of rotation of engine:	3300 rpm	3300 rpm

Complies with the provisions of Directive: 98/37/EC Essential Health & Safety Requirements.
Relating to the Design & Construction of Machinery and Safety Components, as amended and the regulations transposed into national law.

Also Directive 2004/108/EC Electromagnetic Compatibility and the regulations transposed into national law.

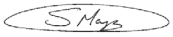
Also Directive 2000/14/EC Noise emission in the environment by equipment for use outdoors as amended and the regulations transposed into national law.
Procedure applied for the conformity assessment: ANNEX VI, procedure 1.

Notified Body: Intertek Testing & Certfication Ltd,
Intertek House, Cleeve Road, Leatherhead. KT22 7SB. ENGLAND
Notified body identification No: 0359

Measured sound power level:	97 dB(A)	97 dB(A)
Guaranteed sound power level:	98 dB(A)	98 dB(A)

Complies with harmonized standards: EN 836 and EN ISO 14982

Signed



S.A Maryniak
(Technical Director)

Date: 02.03.2007
Declaration done and technical documentation kept at:
HAYTER LIMITED
Spellbrook, Bishop's Stortford, Herts.
CM23 4BU ENGLAND

Vibration Information
The vibration level at the operator contact positions, measured in accordance with European Standard EN 836.
CODE 181E – 4.6 ms^{-2} CODE 182E – 5.93 ms^{-2}

Operators Daily Personal Noise Exposure:
HAYTER LIMITED have no control over site conditions, duration of use, state of maintenance or adjustment of the mower. All of these factors will affect the operator's daily personal noise exposure level – LEP,d. Under typical working conditions operators could be exposed to a daily personal noise exposure level in excess of 85 dB(A) LEP,d.

Sound pressure level:
The maximum sound pressure level at the operator's position is 84 dB(A) measured in accordance with European Standard EN836.

If hearing protection is required, ear protectors with good attenuation in the 63 – 8000 Hz frequency range should be used. Employers of personnel using this machine are advised to read "The Control of Noise at Work Regulations 2005" as the operator's daily personal exposure level could be above the 'First Action Level'.

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NOTES

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NOTES

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CUSTOMER INFORMATION

Serial No:

Engine Type:- GCV135 **Engine:-** Honda
Engine Type:- GCV160 **Engine:-** Honda

Date of Sale:- _____

Your Local Dealer:-

DEALER STAMP

Notes:-

111-2596 (A) 23/7/08 3:28 pm Page 1.34

YOUR DEALER IS:

allen

Manufactured by Hayter Limited

HAYTER
MAKERS OF THE FINEST MOWERS

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Spellbrook, Bishop's Stortford, Herts, CM23 4BU, England.
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e-mail: sales@hayter.co.uk www.hayter.co.uk